

2004 - 2005 PROPOSED SCOPE OF WORK for:
Hydrology Support for Water Acquisition Activities

Project #:19H

Lead Agency: Water Acquisition Committee

Submitted by: George Smith
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Category:

- ☐ Ongoing project
- ☒ Ongoing-revised project
- ☐ Requested new start

Expected Funding Sources:

- ☒ Annual funds
- ☐ Capital funds
- ☐ Other (explain)

I. Title of Proposal:

Hydrology Support for Water Acquisition Activities

II. Relation to RIPRAP:

The work items proposed support water acquisition activities in the RIPRAP and under the direction of the Water Acquisition Committee.

Colorado River Action Plan: Mainstem

I.A.5. Provide and legally protect instream flows pursuant to Colorado River PBO

I.A.5.a. Deliver Ruedi flows to 15-Mile Reach

I.A.3.b. Develop Consumptive Use and Loss report for CRDSS model

I.A.5.i. Coordinated Reservoir Operations

Green River Action Plan: Mainstem

I.A.4.a.3 Legally Protect Summer/Fall Flows

Green River Action Plan: Yampa and Little Snake Rivers

I. Provide and Protect Instream Flows

III. Study Method/Approach:

This proposal represents a compilation of Division of Water Resources activities to support ongoing hydrology data collection, contract administration, and development of data necessary for the Water Acquisition Committee to assess the acquisition of water. Major activities include: preparing scopes of work for WAC projects; preparing contracts and

agreements; preparing annual reports; overseeing contract administration; and coordinating ongoing Recovery Program activities.

IV. Study Area:

Colorado and Green River Basins

VI. Study Goals, Objectives, and End Products:

To facilitate Recovery Program activities in the area of water right acquisition, instream flow filings, contract administration, updates to the RIPRAP, and reports of findings.

VI. Task Descriptions:

A. Gage Installation and Maintenance

The Division of Water Resources will continue to work with the U.S. Geological Survey, Bureau of Reclamation, and Colorado Division of Wildlife to maintain the current gage at the head of the 15-Mile Reach of the Colorado River and two gages at Deerlodge Park on the Yampa River. Work will continue on the development and coordination of agreements with the Central Utah Water Conservancy District and USGS for the operation and maintenance of two gages located on the Duchesne River and a temperature probe to be installed on the Jensen gage. Work with the USBR and the Utah Department of Natural Resources to install and maintain a USGS gage at Woodside on the Price River.

B. Hydrology Support for the Water Acquisition Committee

1. Water Right Acquisition

The Division of Water Resources will continue to support the Water Acquisition Committee in water right investigations as originally envisioned by the Recovery Program. The work will require working with willing sellers and potential lessors to gather information and acquire water rights. This task has become less important recently as water right acquisition has been given less priority and the optimization of existing facilities has become the focus of the Water Acquisition Committee. The tasks listed below are in support of the expanded mission of the Water Acquisition Committee.

- a. Developing scopes of work for water rights evaluations by the water right consultant, and overseeing contract administration, consultant supervision, and review of the consultant's work.
- b. Facilitating the annual renewal (if needed) of the lease and delivery of water from Steamboat Lake.
- c. Coordinating conservation flow releases from Steamboat Lake, and

advising Tri-State Generation when to begin using storage water (up to 1,000 AF) pursuant to the terms of the Craig III Biological Opinion.

- d. Providing annual reports on the delivery and benefits of flows from Ruedi, and Wolford Mountain reservoirs.
- e. Preparing annual scopes of work and annual reports for projects in support of Water Acquisition Committee activities.

C. Colorado River PBO Depletion Accounting

The Division of Water Resources will continue to work with the staff of the Colorado Water Conservation Board (Board) to account for new water depletions. Beginning in 2004, the Service and the Board will jointly collect consumptive use data and other data necessary to update either the State's CRDSS Consumptive Use Model or the State's CRDSS Colorado River Mainstem Water Right Planning Model "C1 run" as described in Appendix F of the PBO. Data collected would include irrigated acres, climatic data needed to run the "Modified Blaney-Criddle" consumptive use model, as well as data on evaporation, municipal and industrial uses, and other consumptive uses identified in Bureau of Reclamation's consumptive uses and losses report. The Service would provide a list of projects and new depletions consulted on during each 5 year period. The updated information will be submitted to a technical group (similar to the technical group which worked on the PBO) for peer review. The technical group will determine which depletions have actually occurred, because only those depletions which have actually occurred will count against the 120,000 acre-feet/year. Once the technical group and any other interested entity has verified the depletions, they will be submitted to the Recovery Program for final review. Beginning in 2005, the State's CRDSS Consumptive Use Model will be run and a consumptive use and losses report will be developed. This report would verify the present level of depletions.

Tasks

1. Visit the Grand Junction Ecological Services Office and Compile a complete list of water project consulted on since the PBO has been completed. A data form will be completed with the project name, location depletion schedule and contact person.
2. Work with Board staff to identify and quantify other non point depletions.
3. Work with the Board staff to convene a technical group to review the list of new depletions. This group may be organized as a subset of the Water Acquisition Committee.

D. Coordinated Reservoir Operations:

Provide assistance to Bureau of Reclamation in implementing a monitoring program to follow how peaks develop, and a data base of flow and operational criteria for the coordinated Reservoir operation study. Work will be coordinated with the efforts of the Loveland and Grand Junction offices of Bureau of Reclamation, Denver Water, CWCB, and the State Engineer. Activities will include: representing the Service at coordinated reservoirs work group meetings, assisting in the scheduling of public meetings, reviewing press releases, representing the Recovery Program at public meetings, monitoring runoff, and participating in the scheduling of reservoir releases to enhance peaks.

When coordination is completed, a report will be prepared that summarizes the coordination effort and reviews the results of the channel monitoring effort in the 15-Mile Reach. The report will begin to relate the findings of the channel monitoring effort to the findings of the monitoring effort and the biology of the endangered fish life history requirements. Scopes of work and agreements will be prepared to provide for channel monitoring funds for the 15-Mile Reach.

E. General Support Activities:

The Division of Water Resources will participate in technical discussions with the CWCB staff in an effort to clarify and quantify the Services Instream flows for endangered fish. The work will include attending meetings, reviewing reports, providing comments, and reporting back to the Service and the Water Acquisition Committee. This effort is in support of the flow filings outlined in the RIPRAP.

The Division of Water Resources will participate in the Division 5 coordinated facilities study. Planned activities include the reviewing work products, developing hydrological data, projecting water development, and interpreting the results as they relate to endangered fish flow. The work will include attending meetings, reviewing reports, providing comments, and reporting to the Service and the Water Acquisition Committee.

The Division of Water Resources will represent the Service and the Recovery Program as one of the "HUP managing Entities" which was set up to implement the Orchard Mesa Check settlement. Work includes attending annual kickoff and wrap-up meeting in Grand Junction and participation in weekly conference calls beginning early in July and ending when irrigation ends in November. Each week river flows must be tracked, flow targets coordinated with Service biologist and recommendations made on how best to release reservoir water secured by to Recovery Program to meet targets and provide benefits to endangered fish.

The Division of Water Resources will continue to work on protection for endangered fish basin wide.

The Division of Water Resources will continue to coordinate the reviews by the

Geomorphology Peer Review Panel.

Serve as Chairman of the Water Acquisition Committee, develop annual updates to the RIPRAP, coordinate scopes of work, develop meeting agendas, distribute meeting material, and conduct meetings.

VII. Study Schedule:

The work will proceed in accordance with the schedules of the various components of the RIPRAP.

VIII. Deliverables:

Given the diverse nature of the work involved, some deliverables are hard to specify. Annual progress reports will be prepared for the Recovery Program. In addition to the Program reports, annual reports will be prepared documenting Ruedi releases and gage operation with the appropriate data. Documents such as appraisal reports, water rights evaluations, and flow analysis will be produced by a water rights consultant under the supervision of the Division of Water Resources.

IX. FY 2004 Budget: By Task

Task A

Cost Category	Cost Per Week	Weeks	Total	Task Total
Principal Investigator	2,075	2	4,150	
Clerical & Accounting	710	.9	639	
Travel (Per diem)			600	
Task Subtotal			5,389	5,389

Task B

Cost Category	Cost Per Week	Weeks	Total	Task Total
Principal Investigator	2,075	5.6	11,620	
Clerical & Accounting	710	1	710	
Travel (Per diem)			800	
Equipment			500	
Supplies			270	
Task Subtotal			13,900	13,900

Task C

Cost Category	Cost Per Week	Weeks	Total	Task Total
Principal Investigator	2,075	4.0	8,300	
Clerical & Accounting	710	0.2	142	
Travel (Per diem)			470	
Supplies			270	
Task Subtotal			9,182	9,182

Task D

Cost Category	Cost Per Week	Weeks	Total	Task Total
Principal Investigator	2,075	5	10,375	
Clerical & Accounting	710	1	710	
Travel (Per diem)			1,300	
Equipment			350	
Supplies			122	
Task Subtotal			12,857	12,857

Task E

Cost Category	Cost Per Week	Weeks	Total	Task Total
Principal Investigator	2,075	7.5	15,562	
Clerical & Accounting	740	1	710	
Travel				
Per diem			500	
Airline tickets			800	
Equipment			100	
Task Subtotal			17,672	17,672.5

GRAND TOTAL				59,000
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FY 2005 Budget: By Task

Task A

Cost Category	Cost Per Week	Weeks	Total	Task Total
Principal Investigator	2,165	3.4	7,361	
Clerical & Accounting	740	1.0	740	
Travel (Per diem)			600	
Task Subtotal			8,701	8,710

Task B

Cost Category	Cost Per Week	Weeks	Total	
Principal Investigator	2,165	5.6	12,124	
Clerical & Accounting	740	2	1,480	
Travel (Per diem)			1,000	
Equipment			500	
Supplies			341	
Task Subtotal			15,445	15,445

Task C

Cost Category	Cost Per Week	Weeks	Total	
Principal Investigator	2,165	2.3	4,979	
Clerical & Accounting	740	1.5	1,110	
Travel (Per diem)			438	
Supplies			270	
Task Subtotal			6,798	6,798

Task D

Cost Category	Cost Per Week	Weeks	Total	
Principal Investigator	2,165	5	10,825	
Clerical & Accounting	740	1.3	962	
Travel (total)				
Per diem 9 days			800	
Pool vehicle charge back			900	
Equipment			369	
Supplies			250	
Task Subtotal			13,811	13,811

Task E

Cost Category	Cost Per Week	Weeks	Total	
Principal Investigator	2,165	6.7	14,505	
Clerical & Accounting	740	1.0	740	
Travel				
Per diem 5 days			500	
Airline Tickets			800	
Pool vehicle charge back			200	
Task Subtotal			16,745.5	16,745.5

GRAND TOTAL				61,500
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Budget Summary:

FY 2004 Budget: \$59,000

FY 2005 Budget: \$61,500

X. Reviewer: Water Acquisition Committee, Angela Kantola